IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) An optical pickup apparatus for recording or reproducing information on or from an optical disc, said apparatus comprising:

a light source radiating a laser beam;

an optical detector detecting reflected light from the optical disc;

a collimator lens converting the radiated light of said light source into a fine divergent pencil of rays; and

an objective lens that focuses said rays on said optical disc, wherein:

said collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma aberration of the radiated light in correspondence to a radial distance between a center of the collimator lens and a position at which said radiated light intersects said collimator lens and

a ratio of sine amount (SIN θ_2/SIN θ_1) between a sine amount (SIN θ_1) of the radiated light from said light source with respect to an optical axis and a sine amount (SIN θ_2) of the light after radiating through said collimator lens with respect

to the optical axis increases in substantial proportion to a square of said radial distance.

2. (Canceled).

3. (Currently Amended) An optical pickup apparatus for recording or reproducing information on or from an optical disc, said apparatus comprising:

a first light source radiating a laser beam having a first wavelength;

a first detector detecting reflected light from the optical disc;

a second light source radiating a laser beam having a second wavelength longer than said first wavelength;

a second detector detecting reflected light from the optical disc;

a light separator introducing the laser beam having said first wavelength and the laser beam having said second wavelength to the substantially same optical axis;

an objective lens functioning so as to form a smaller spot from the laser beam having said first wavelength than from the laser beam having said second wavelength;

a first collimator lens converting the radiated light of said first light source into a substantially parallel beam; and

a second collimator lens converting the radiated light of said second light source into a fine divergent pencil of rays, wherein:

said second collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma aberration of the radiated light of said second light source in correspondence to a radial distance between a center of said second collimator lens and a position at which the radiated light of said second light source intersects said second collimator lens and

a ratio of sine amount (SIN θ_2/SIN θ_1) between a sine amount (SIN θ_1) of the radiated light from said second light source with respect to the optical axis and a sine amount (SIN θ_2) of the light after radiating through said second collimator lens with respect to the optical axis increases in substantial proportion to a square of said radial distance.

4. (Canceled).

5. (Currently amended) An optical pickup apparatus ~~as claimed in claim 3, wherein~~ for recording or reproducing

information on or from an optical disc, said apparatus comprising:

a first light source radiating a laser beam having a first wavelength;

a first detector detecting reflected light from the optical disc;

a second light source radiating a laser beam having a second wavelength longer than said first wavelength;

a second detector detecting reflected light from the optical disc;

a light separator introducing the laser beam having said first wavelength and the laser beam having said second wavelength to the substantially same optical axis;

an objective lens functioning so as to form a smaller spot from the laser beam having said first wavelength than from the laser beam having said second wavelength;

a first collimator lens converting the radiated light of said first light source into a substantially parallel beam; and

a second collimator lens converting the radiated light of said second light source into a fine divergent pencil of rays, wherein:

said second collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma

aberration of the radiated light of said second light source in correspondence to a radial distance between a center of said second collimator lens and a position at which the radiated light of said second light source intersects said second collimator lens, and

with respect to said second collimator lens, a ratio of a radius of curvature (R2/R1) corre-sponding to a ratio between a radius of curvature R1 of the incident surface and a radius of curvature R2 of the radiating surface is within a range between 0.5 and 0.8.

6. (Currently amended) An optical pickup apparatus as claimed in claim ~~4~~ 3, wherein with respect to said second collimator lens, a ratio of a radius of curvature (R2/R1) corresponding to a ratio between a radius of curvature R1 of the incident surface and a radius of curvature R2 of the radiating surface is within a range between 0.5 and 0.8.

7. (Currently Amended) An optical pickup apparatus for recording or reproducing information on or from an optical disc, said apparatus comprising:

a first light source radiating a laser beam having a first wavelength;

a first detector detecting reflected light from the optical disc;

a second light source radiating a laser beam having a second wavelength longer than said first wavelength;

a second detector detecting reflected light from the optical disc;

a light separator introducing the laser beam having said first wavelength and the laser beam having said second wavelength to the substantially same optical axis;

an objective lens functioning so as to form a smaller spot from the laser beam having said first wavelength than from the laser beam having said second wavelength;

a first collimator lens converting the radiated light of said first light source into a substantially parallel beam; and

a second collimator lens converting the radiated light of said second light source into a fine divergent pencil of rays, wherein:

the radiated light of said second light source forms an optical path reaching said objective lens through said second collimator lens and said light separating means, and

said second collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma aberration of the radiated light of said second light source in

correspondence to a radial distance between a center of the second collimator lens and a position at which the radiated light of said second light source intersects said second collimator lens and

a ratio of sine amount (SIN θ_2/SIN θ_1) between a sine amount (SIN θ_1) of the radiated light from said second light source with respect to the optical axis and a sine amount (SIN θ_2) of the light after radiating through said second collimator lens with respect to the optical axis increases in substantial proportion to a square of said radial distance.

8. (Canceled).

9. (Currently amended) An optical pickup apparatus ~~as claimed in claim 7, wherein~~ for recording or reproducing information on or from an optical disc, said apparatus comprising:

a first light source radiating a laser beam having a first wavelength;

a first detector detecting reflected light from the optical disc;

a second light source radiating a laser beam having a second wavelength longer than said first wavelength;

a second detector detecting reflected light from the optical disc;

a light separator introducing the laser beam having said first wavelength and the laser beam having said second wavelength to the substantially same optical axis;

an objective lens functioning so as to form a smaller spot from the laser beam having said first wavelength than from the laser beam having said second wavelength;

a first collimator lens converting the radiated light of said first light source into a substantially parallel beam; and

a second collimator lens converting the radiated light of said second light source into a fine divergent pencil of rays, wherein:

the radiated light of said second light source forms an optical path reaching said objective lens through said second collimator lens and said light separating means,

said second collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma aberration of the radiated light of said second light source in correspondence to a radial distance between a center of the second collimator lens and a position at which the radiated light of said second light source intersects said second collimator lens and

with respect to said second collimator lens, a ratio of a radius of curvature (R2/R1) corre-sponding to a ratio between a radius of curvature R1 of the incident surface and a radius of curvature R2 of the radiating surface is within a range between 0.5 and 0.8.

10. (Currently amended) An optical pickup apparatus as claimed in claim ~~8~~ 7, wherein with respect to said second collimator lens, a ratio of a radius of curvature (R2/R1) corre-sponding to a ratio between a radius of curvature R1 of the incident surface and a radius of curvature R2 of the radiating surface is within a range between 0.5 and 0.8.

11. (Currently Amended) An optical pickup apparatus for recording or reproducing information on or from an optical disc, said apparatus comprising:

a first light source radiating a laser beam having a first wavelength;

a first detector detecting reflected light from the optical disc;

a second light source radiating a laser beam having a second wavelength longer than said first wavelength;

a second detector detecting refl cted light from the optical disc;

a light separator introducing the laser beam having said first wavelength and the laser beam having said second wavelength to the substantially same optical axis;

an objective lens functioning so as to form a smaller spot from the laser beam having said first wavelength than from the laser beam having said second wavelength;

a first collimator lens converting the radiated light of said first light source into a substantially parallel beam; and

a second collimator lens converting the radiated light of said second light source into a fine divergent pencil of rays, wherein:

the radiated light of said second light source forms an optical path reaching said objective lens through said second collimator lens, said light separating means and said first collimator lens, and

said second collimator lens has a surface that is curved to form a wavefront shape that increasingly corrects a coma aberration of the radiated light of said second light source in correspondence to a radial distance between a center of the second collimator lens and a position at which the radiated light

of said second light source intersects said second collimator lens and

a ratio of sine amount (SIN θ_3/SIN θ_1) between a sine amount (SIN θ_1) of the radiated light from said second light source with respect to the optical axis and a sine amount (SIN θ_3) of the radiated light from said second light source after radiating through said first collimator lens with respect to the optical axis increases in substantial proportion to a square of said radial distance.

12. (Canceled).

13. (Original) An optical disc apparatus characterized by using the optical pickup apparatus as claimed in claim 1.

14. (Original) An optical disc apparatus characterized by using the optical pickup apparatus as claimed in claim 3.

15. (Original) An optical disc apparatus characterized by using the optical pickup apparatus as claimed in claim 7.

16. (Original) An optical disc apparatus characterized by using the optical pickup apparatus as claimed in claim 11.